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REMARKS

In accordance with the foregoing, claims 1, 9, 11, and 12 are amended. No new matter is presented and, accordingly, approval and entry are respectfully requested.

Claims 1, 3-9 and 11-13 are pending, of which claims 1, 9, 11 and 12 are independent, and under consideration. Reconsideration is requested

Noted - Priority Document Received By USPTO

The indication (see, Office Action Summary of the Office Action dated December 17, 2004, box 12(a)(1) as checked) that the certified copy of the priority document has been received by the USPTO is noted with appreciation.

Noted - IDS Considered

The indication (see attachment to the Office Action dated December 17, 2004 and the Office Action dated June 24, 2005) that the Information Disclosure Statement as filed on June 15, 2001 and references listed therein have been considered is noted with appreciation.

Noted - Drawings Approved

The indication (see present Office Action Summary, box 10(a) as checked) that the Drawings (submitted on May 23, 2001) have been approved is noted with appreciation.

Traverse of Claim Rejection Under 35 U.S.C. §103

In item 3 of the Office Action, the Examiner rejects claims 1, 3-9 and 11-13 under 35 U.S.C. §103(a) as being unpatentable over Ching (U.S. Patent No. 6,560,620) ("Ching") in view of Fleischer (U.S. Patent No. 5,960,383) ("Fleischer") and further in view of Morris et al. (Lexical cohesion computed by thesaural relations as an indicator of the structure of text, Computational Linguistics, 1999, volume 17, pages 21-48) ("Morris").

The rejection is traversed. Applicant submits that all of the features recited by at least each of the independent claims 1, 9, 11 and 12 are not taught by even an *arguendo* combination of the art of record.

Independent Claim 1

As an example, independent claim 1 recites (among other things):

a) "a thematic hierarchy recognizing device recognizing a thematic hierarchy of each of the plurality of documents:"

1) "by repeating a process for detecting a set of thematic boundaries in each layer of the thematic hierarchy, with each of a plurality of different window widths, wherein each of the thematic boundaries is detected based on a lexical cohesion score

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obtained from a <u>similarity of vocabularies that appear in two adjacent windows</u> with each of the window widths at each location in each of the plurality of documents, and"

        2) "by <u>correlating first and second thematic boundaries</u> locating closely and detected <u>with smaller and larger window widths</u>, respectively. . ." (Emphasis added).

The Office Action concedes that a combination of Ching and Fleischer does not teach "calculating a lexical cohesion score of description parts in two adjacent windows at each location in each of the plurality of documents, based on a vocabulary appearing in the adjacent windows; a thematic boundary based on the lexical cohesion score for a plurality of different window widths by repeating the calculating." (See, Office Action at page 4).

Applicant submits that Morris does <u>not</u> teach these features and does not overcome the deficiencies in the teachings of Ching and Fleischer. Thus, all of the features of claim 1 are not taught by an *arguendo* combination of Morris with Ching and Fleischer.

By contrast with the recitation of claim 1, Morris merely teaches a transitive distance and a thesaural relationship without any discussion of a similarity of vocabularies that appear in two adjacent windows. For example, Morris merely teaches:

Each <u>lexical relationship</u> in a chain is represented as $(u,v)^y_x$ where:
- u is the current word number,
- v is the word number of the related word,
- x is the <u>transitive distance</u>:

   .....

\• y is either
- the number of the <u>thesaural relationship</u> between the two words (as given in Section 3.2.2)
- Tq where

   .....

(Emphasis added, see, for example, page 32, lines 39-42 and page 33, lines 1-8).

Applicant submits that Morris dos not teach "repeating a process for detecting a set of thematic boundaries in each layer of the thematic hierarchy, with each of a plurality of different window widths" and "correlating first and second thematic boundaries locating closely and detected with smaller and larger window widths," as recited by independent claim 1.

Thus, at least the recitation of claim 1 that "a thematic hierarchy recognizing device recognizing a thematic hierarchy of each of the plurality of documents: by repeating a process for detecting a set of thematic boundaries in each layer of the thematic hierarchy, with each of a plurality of different window widths, wherein each of the thematic boundaries is detected based on a lexical cohesion score obtained from a similarity of vocabularies that appear in two adjacent

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windows with each of the window widths at each location in each of the plurality of documents; and by correlating first and second thematic boundaries locating closely and detected with smaller and larger window widths, respectively," is a distinction over Morris, and thus over an *arguendo* combination with Ching and Fleischer.

Among other things, a *prima facie* case of obviousness must establish that the asserted combination of references teaches or suggests each and every recited element. In view of the distinction of claim 1 noted above, Applicant submits that all of the features are not taught by a combination of the art of record. Thus, the rejection should be withdrawn.

Independent Claim 9

As an example, independent claim 9 recites (among other things):

[R]ecognizing device recognizing a thematic hierarchy of each of the plurality of documents:
    by repeating a process for detecting a set of thematic boundaries in each layer of the thematic hierarchy, with each of a plurality of different window widths, wherein each of the thematic boundaries is detected based on a lexical cohesion score obtained from a similarity of vocabularies that appear in two adjacent windows with each of the window widths at each location in each of the plurality of documents; and
    by correlating first and second thematic boundaries locating closely and detected with smaller and larger window widths, respectively.

(Emphasis added).

The Office Action acknowledges that this feature of claim 9 is not taught by a combination of Ching and Fleischer. (See, Office Action at page 6). Applicant submits that at least this feature of claim 9 also is a distinction over Morris, and thus over a combination of Morris with Ching and Fleischer.

By contrast with the recitation of claim 9, Morris merely teaches a transitive distance and a thesaural relationship without any discussion of a similarity of vocabularies that appear in two adjacent windows.

Further, Morris does not teach a "repeating a process for detecting a set of thematic boundaries in each layer of the thematic hierarchy, with each of a plurality of different window widths" and "correlating first and second thematic boundaries locating closely and detected with smaller and larger window widths," as recited by claim 9, for example.

Thus, a "recognizing a thematic hierarchy of each of the plurality of documents: by repeating a process for detecting a set of thematic boundaries in each layer of the thematic hierarchy, with each of a plurality of different window widths, wherein each of the thematic

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boundaries is detected based on a lexical cohesion score obtained from a similarity of vocabularies that appear in two adjacent windows with each of the window widths at each location in each of the plurality of documents; and by correlating first and second thematic boundaries locating closely and detected with smaller and larger window widths, respectively," as recited by claim 9, for example, is a distinction over Morris, and thus over a combination of Morris with Ching and Fleischer.

Accordingly, Applicant submits that all of the features recited by claim 9 are not taught by a combination of the art of record. Thus, the rejection of claim 9 should be withdrawn.

Independent Claim 11

Independent claim 11 has a similar recitation as claim 9 and as argued above, at least similarly distinguishes over an *arguendo* combination of the art of record. Thus, the rejection of claim 11 should be withdrawn.

Independent Claim 12

As an example, independent claim 12 recites (among other things):

> [T] hematic hierarchy recognizing means for recognizing a thematic hierarchy of each of the plurality of documents:
> by repeating a process for detecting a set of thematic boundaries in each layer of the thematic hierarchy, with each of a plurality of different window widths, wherein each of the thematic boundaries is detected based on a lexical cohesion score obtained from a similarity of vocabularies that appear in two adjacent windows with each of the window widths at each location in each of the plurality of documents; and
> by correlating first and second thematic boundaries locating closely and detected with smaller and larger window widths, respectively.

(Emphasis added).

The Office Action acknowledges that this feature of claim 12 distinguishes over a combination of Ching and Fleischer. (See, for example, Action at page 3).

Applicant submits that at least that same feature of claim 12 also is a distinction over Morris, and thus over its combination with Ching and Fleischer.

By contrast, Morris merely teaches a transitive distance and a thesaural relationship without any discussion of a similarity of vocabularies that appear in two adjacent windows. That is, Morris does not teach "repeating a process for detecting a set of thematic boundaries in each layer of the thematic hierarchy, with each of a plurality of different window widths" and "correlating first and second thematic boundaries locating closely and detected with smaller and larger window widths," as recited by claim 12, for example.

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Thus, a "thematic hierarchy recognizing means for recognizing a thematic hierarchy of each of the plurality of documents: by repeating a process for detecting a set of thematic boundaries in each layer of the thematic hierarchy, with each of a plurality of different window widths, wherein each of the thematic boundaries is detected based on a lexical cohesion score obtained from a similarity of vocabularies that appear in two adjacent windows with each of the window widths at each location in each of the plurality of documents; and by correlating first and second thematic boundaries locating closely and detected with smaller and larger window widths, respectively," as recited by claim 12 is not taught by the art of record. Thus, the rejection of claim 12 should be withdrawn.

Dependent Claims

Dependent claims 3-8 and 13 inherit the patentable recitations of their respective base claims, and therefore, patentably distinguish over the cited art for at least the reason discussed above. Thus, the rejection of claims 3-8 and 13 should be withdrawn

Conclusion

Since features recited by independent claims 1, 9, 11, and 12 (and dependent claims 3-8 and 13) are not taught by even an *arguendo* combination of the art relied on by the Examiner, the rejection should be withdrawn and claims 1, 3-9, and 11-13 allowed.

Conclusion

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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